

Statement of Considerations

REQUEST BY SOLAR TURBINES INCORPORATED FOR AN
ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS
IN SUBJECT INVENTIONS MADE IN THE COURSE OF OR
UNDER DEPARTMENT OF ENERGY COOPERATIVE
AGREEMENT NO. DE-FC21-95MC31173; DOE WAIVER
DOCKET W(A)-95-041 [ORO-614]

Solar Turbines Incorporated has made a timely request for an advance waiver to worldwide rights in Subject Inventions made in the course of or under Department of Energy (DOE) Cooperative Agreement No. DE-FC21-95MC31173 with DOE's Federal Energy Technology Center (FETC). The scope of the work calls for the development and commercialization of an ultra-high efficiency, environmentally-superior and cost competitive advanced turbine system (ATS) for base-load applications in the utility, independent power producer and industrial markets. The work is sponsored by the Office of Energy Efficiency and Renewable Energy. This cooperative agreement is Phase 3 of DOE's ATS program.

The dollar amount of the cooperative agreement is \$165,008,518, with Solar cost sharing \$97,328,148 or 59% of the cooperative agreement. In addition, Solar is providing in-kind contributions having a value of \$57,584,000.

Through both in-house product development programs and externally funded work, Solar pursues an aggressive research and development program to continually improve its equipment for durability, fuel efficiency, output power and emissions reductions. This effort covers a wide area including materials development, aerothermal design, mechanical design and analysis, combustion engineering, and steam technology. Solar's experience, expertise and commitment will contribute substantially to commercialization of the inventions made under the cooperative agreement.

Solar is the world's leading manufacturer of industrial gas turbines and gas turbine-driven generator sets for applications in the 1-50 MW range. Solar sells turbines and turbomachinery products worldwide to diverse markets such as the oil and gas industry, industrial cogeneration, independent power producers and other operations such as hospitals, and schools. Approximately 40% of the worldwide gas turbine installations in this size range are Solar products. Less than 2% of total sales are to the U.S. Government. Considering its market position, Solar has the capability to commercialize the gas turbines developed under the cooperative agreement.

Solar has a history of research and development leading to commercialization of developed turbines and has also made investments in advanced compression, thermal recuperation and dry low NO_x combustion technologies that will have direct application to the work under this cooperative agreement. Solar provided cost sharing of 25% or approximately \$1.3 million under Phase 2 of

DOE's ATS program (contract number DE-AC21-93MC30246), and 23.7% or approximately \$7.4 million under DOE's Ceramic Stationary Gas Turbine program (contract number DE-AC02-92CE40960) that is managed at the Department's Chicago Operations Office (CHO). These investments have direct relevance to the current cooperative agreement.


The cooperative agreement has been executed and is proceeding with the standard DOE long form Patent Rights clause. As noted above, this cooperative agreement is very closely associated with the Ceramic Stationary Gas Turbine program managed at CHO. CHO's Intellectual Property Law Division approved certain modifications to the standard "Advance Waiver of Patent Rights" clause when that advance patent waiver was negotiated. This same amended version of the "Advance Waiver of Patent Rights" clause was incorporated in the Phase 2 ATS contract. Solar requested that, for ease of administration, the same terms be included in the subject cooperative agreement. Therefore, if the requested waiver is approved, the patent rights clause of the above-mentioned cooperative agreements embodying DOE waiver terms and conditions including march-in rights, retention by the Government of a license and preference for U.S. industry clauses, will be added by a no-cost modification to the cooperative agreement.

Solar agrees that products, processes or services used or sold by it or its affiliates embodying any waived invention will be manufactured, practiced or provided substantially in the United States. Solar also agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. DOE may waive this requirement in individual cases if Solar can show to the satisfaction of DOE that reasonable but unsuccessful efforts were made to grant licenses on similar terms to persons that would be likely to manufacture substantially in the United States or that domestic manufacture is not commercially feasible. Further, Solar agrees that any license or other transfer of rights in a subject invention to third parties is subject to the prior approval of DOE.

Granting of the waiver should have little effect on competition and market concentration since this is one of many previously or yet-to-be developed similar technologies in the marketplace. Other companies have cooperative agreements with DOE to develop competing turbines and are in a position to request waivers themselves, therefore there should not be undue market concentration of Solar products.

Grant of the requested waiver will provide Solar with an incentive to contribute the value of related background technology and parallel internal research programs to the DOE ATS program, thus more effectively promoting the commercial utilization of the ATS inventions and bringing the program's benefits to the marketplace sooner than would otherwise be possible. Further, grant of the requested waiver should serve as encouragement to other DOE recipients and contractors that significant cost sharing will be recognized as an acceptable consideration for granting greater rights in subject inventions.

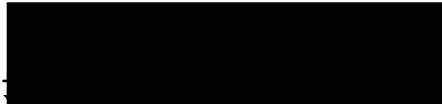
In view of the acceptable level of cost sharing by Solar, and the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver of worldwide rights be granted.



Lisa A. Jarr
Patent Attorney

Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interest of the United States and the general public will best be served by a waiver of U.S. and foreign patent rights, and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the cost-shared cooperative agreement where, through such a modification or extension, the purpose, scope, or cost of the cooperative agreement is substantially altered.


CONCURRENCE:



William P. Parks, Jr.
Director, Office of Crosscutting Technologies
Energy Efficiency and Renewable Energy

Date: 6/12/98

APPROVAL:



Paul A. Gottlieb
Assistant General Counsel for Technology
Transfer and Intellectual Property

Date: 6-16-98

(4) Notwithstanding the foregoing paragraph (k) (3), the Contractor shall not be obligated to license any Background Patent if the Contractor demonstrates to the satisfaction of the Secretary or his designee that the Contractor or its licensees are supplying the subject matter covered by said Background Patent in sufficient quantity and at reasonable prices to satisfy market needs, or have taken effective steps or within a reasonable time are expected to take effective steps to so supply the subject matter.

(1) Atomic Energy.

(1) No claim for pecuniary award or compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted by the Contractor or its employees with respect to any invention or discovery made or conceived in the course of or under this contract.

(2) Except as otherwise authorized in writing by the Contracting Officer, the Contractor will obtain patent agreements to effectuate the provisions of paragraph (1) (1) of this clause from all persons who perform any part of the work under this contract, except nontechnical personnel, such as clerical employees and manual laborers.

(m) Limitation of rights.

Nothing contained in this Patent Rights clause shall be deemed to give the Government any rights with respect to any invention other than a Subject Invention except as set forth in the Patent Rights clause of this contract.

(n) Limitation in Alienation of Waived Rights

Except for the license reserved to the Contractor in (c) (1), the Contractor agrees that any alienation of rights in waived subject inventions by assignment, license or otherwise is subject to written approval of the Contracting Officer; and further that in the event a controlling interest is to be acquired by a foreign entity in the Contractor or to any assignee or licensee of a waived invention, then in that case any rights in the waived invention to be acquired by the foreign entity will be subject to written approval of the Contracting Officer.

(o) U.S. Competitiveness

The Contractor agrees that any product, process or service using any intellectual property arising from the performance of this contract, including that resulting from a subject invention, shall be manufactured, practiced or provided substantially in the United States.